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Knowledge, Attitude and Practice of Teachers Training College Students towards Voluntary Counseling and Testing For HIV

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immune Deficiency Virus
KAP	Knowledge Attitude and Practice
TTC	Teachers Training College

ABSTRACT

Back ground: Voluntary HIV counseling and testing (VCT) is one of the corner stones of HIV prevention strategies. It is essential to understand HIV testing correlates and their theoretical under spinning in order to promote VCT uptake. From this point of view this study aimed to assess the awareness of college students towards VCT for HIV/AIDS in TTC students ,Gondar.

Objective: The aim of this study to assess knowledge, attitude and practice(KAP) towards VCT among teacher's Training college (TTC) students in Gondar town.

Methods. : Across sectional study was conducted from January to June 2014 using multistage sampling method, involving stratification of students based on their year of study, followed by random sampling of departments and random selection of students from the departments, to enroll students from different departments in the study. A total of 364 TTC students was included in the study. Self-administered structured questionnaire was used to collect data. Data was entered and analyzed using SPSS version 16 software. The association between different socio-demographic characteristics of the study participants and their awareness towards VCT for HIV were assessed by Chi square test. A P-value of <0.05 was considered as statistically significant

Result: About 51.6% of the study participants were males and more respondents were age between 17-21 years old. Majority (98.6%) of the respondents were Orthodox with 59.3% reported living in rural areas before joining the college. From the study participants 98.349% were knowledgeable on VCT, 33.65% had positive attitude towards VCT for HIV and 28.6%had had VCT for HIV in the past and 13.7% had taken by this year. Previous residence before joining the college, year of study, sex among the socio-demographic variables and knowledge with attitude that showed statistically

significant association with the one or more of the outcome variables. Fear of positive results, stigma and discrimination following the positive results were reported as main obstacles for VCT uptake by the college students.

Conclusion: The finding of this study make known important barriers for VCT uptake and making more in knowledge and attitude of college students is vital for VCT up take**:**

Keywords: Voluntary counseling and testing, Knowledge, Attitude, Practice5.

1. INTRODUCTION

1.1.Background

Acquired immune deficiency syndrome (AIDS) is currently a major problem to the world's population, to its social, economical and political wellbeing as well as to the individual health of hundreds of millions of people (1).

At the end of 2010, an estimated 34 million people were living with human immune virus (HIV). The number of people dying AIDS –related cause was 1.8 million and there were 2.7 million new HIV infections. Sub-Saharan Africa remains the region most heavily affected by HIV .About 68% of all people living with HIV resided in sub Saharan Africa which also accounted for 70% of new HIV infections. The epidemic was most sever in South Africa which has more people living with HIV (an estimated 5.6million) than any other country in the world (1). With an estimated 1.1 million people living with HIV, Ethiopia has one of the largest populations of HIV infected people in the world in 2009, In the same year an adult HIV prevalence was estimated to be 1.8%for males and 2.8%for females (2).the estimated national incidence late as inferred from prevalence data to be (1.5%) and (0.4%) for towns and rural areas respectively (2).

Ethiopia, as a country in the Sub-Saharan region, is a country with high HIV prevalence. According to the single point estimate, the Ethiopian adult HIV prevalence was 2.2% in 2008 with an estimated 1,037,267 people living with HIV in the country (3). According to the Ethiopian demographic and health survey report of 2011, the percentage of HIV positive in the age group 15–24 years was less than one percent (4).

Many countries have been trying to take many different approaches in an attempt to slow the spread of HIV infection and minimize its impact on the individual, family and society. Among these strategies include; voluntary counseling and testing (VCT), provider initiated counseling and testing (PICT), diagnosis of HIV in infants and young children, family care and partner testing and counseling based on index care, condom promotion and provision, detection and management of sexually transmitted infections, safer sex and risk reduction counseling, male circumcision, targeted interventions for sex workers and homosexuals (5). Among these VCT is internationally recognized as an effective and important strategy for both prevention and care of HIV (6).

It should be targeted that access to VCT is recognized as critical strategy for responding to HIV/ AIDS in low and middle income as well as in high income countries .It's recommended that investigating in VCT is more cost effective and its uptake could be taken as a critical entry point (7). VCT is the effective strategy for facilitating behavioral change around both preventing HIV as well as getting early care and support. It's also instrumental in bringing about behavioral change, decreasing unprotected sex and helping reduce the incidence of HIV and others (8).

1.2.Statements of the Problem

In order to reach the HIV/AIDS treatment goals detailed in the national read map for accelerating access to HIV/AIDS treatment in Ethiopia 3,446,497 clients should have been counseled and tested by end of 2006.the current number of VCT clients represents only 16.4% of the target .A closer look at regional data reveals that almost all regions are below their respective targets in terms of VCT coverage in four regions, Amhara, Somali, Afar and Gambella, VCT coverage did not even reach 10%of the target (9).

There are several factors influencing the utilization of VCT centers ,which needs investigation These factors include the prevailing low health seeking behavior and awareness of the population towards VCT, importance of VCT centers in terms of availability and continuous supply of testing kits and reagents. Lack of dedicated full time staff lack mobile clinic and minimal linkage social mobilization (9).

Many countries have been trying to take many different approaches in an attempted to slow the spread of HIV infection and minimize its impact on the individual, family and society ,among these strategy include VCT provider initiated counseling and testing, diagnosis of HIV in infants and young children, family care and partner testing and counseling based on index care, condom promotion and provision and detection and management of sexually transmitted infections, safer sex and risk reduction counseling, male circumcision, targeted interventions for sex worker and homosexuals (9).

Among these VCT is internationally recognized as an effective and vital strategy for both prevention and care of HIV (9).

Researches conducted among university students showed this fact. For example a study done, from Bahirdar university students showed the utilization of VCT was 38.6% like from Debre Birhan TTC students 35.19% of the respondents have ever been tested for HIV despite higher level of knowledge and favorable attitude towards VCT among the study population (10)

There are a lot of reports on awareness and uptake of VCT service from different study group in the study site (10). However there are no studies conducted on the knowledge attitude and practice of for appropriate for college students.VCT for HIV allow individuals to know their

HIV status serve as get way for both HIV prevention and early access to treatment ,care and support (11).

2. Literature Review

Across-sectional study was conducted in Nigeria polytechnic in south in east in 2006 September 15 from 260 students only 115(63.2%) of the students were aware of VCT with 68(59.1%) having heard of it at least one year prior to the study .Mass media and churches were the highest sources of information on VCT most of the students did not know where VCT service could be obtained and knowledge of what VCT entails was also low, However 127(64.3%)were ready to take positive in good fate, at least one out of every four students(54of 128) had been sexually active within three month preceding the study only 48(26.4%) students had taken an HIV test at one time or the other before had been tested went for the screening just to know their HIV status. Premarital testing(18.8%) was the second commonest reason for taken HIV test, majority of the respondents(74.2%) were willing to go for VCT among those who were not willing to go for VCT the commonest reason given was that they were certain they were not infected (12).

A cross-sectional study was done in Kilimanjaro region, Tanzania, 2009, from a total of 309 students were recruited, among these 197 (63.8%) were females. All respondents were aware of the benefits of VCT. Only 107 (34.6%) of students have had VCT previously. About 59 (19.1%) of the students had negative for health care professional to attend VCT. Risk perception among the students was low (37.2%) even though they were found to have higher risk behaviors that predispose them to get HIV infection (5).

A cross-sectional study was done in Tiko, Cameroon, among 474 students. All the respondents had heard about HIV/AIDS with their main sources of information being school (61.5%) and the media (50.5%). The three main modes of transmission identified were; unprotected sexual contact (82.5%), contaminated blood transfusions (69.8%) and contaminated sharp objects (60.1%). According to respondents, the means of prevention of HIV/AIDS were abstinence (mentioned by 95.4, use of condoms (mentioned by 48.3%) and faithfulness to one partner (mentioned by 46.4%). Most of the respondents (73.8%) had heard about VCT with their main sources of information being television (40.3%) and school (34%). The majority (82.8%) of those who had heard of VCT identified health institutions as VCT providers, while 48.8% identified counseling and 66.2% testing, as activities carried out at VCT services. Four hundred and twelve (86.9%) respondents reported that VCT was necessary with as main reason, the fact that it made them know their HIV status (80%). The majority (83.1%) of the students also

reported that everybody should go for VCT and 78.9% reported they could recommend VCT to a family member. Two hundred and twenty four (47.3%) respondents were sexually active. The mean age of sexual debut was 16.9 ± 1.7 years. More than 60% of them (64.7%) had had sex before they were 18 years with 22.3% having their sexual debut at 15 years or less. Also, 42.8% of the sexually active population had had two or more sexual partners in the last year while 59% had had unprotected sex. However, only 18.8% of the students felt they were at risk of getting HIV (13).

A cross sectional study was done in Mekelle, Tigray, among 413 university students. Majority 145(35.1%) of the respondents preferred the VCT service to be given in youth clubs followed by Government Institutions 105(25.4%).The female respondents were found to have a significant association to accept VCT for HIV with the OR=1.95(1.27,2.99). In this study females were more knowledgeable and willing to VCT for HIV than that of the males. Still cost of VCT matters, in which the respondents prefer to be tested at youth clubs and Government hospitals. Therefore, both sexes should have to be empowered to accept VCT for HIV through peer initiated VCT services at all levels of care including in Universities (14).

A cross sectional study design was done in Debrmarkos, among 711 students. Majority (81.4%) heard about the confidential VCT service, and their major sources of information were mass media (73.3%) and health workers (71.1%). The study revealed that 58.5% of the study participants had undergone voluntary counseling and testing. It was shown that VCT service utilization was significantly associated with availability of ART drug in VCT site, heard presence of confidentiality, perceived stigma, risk perception and knowledge about HIV (15)

Across-sectional study was done from February to May 2010 from among a total of 330 university students in North West Ethiopia, Gondar. From the study participants 86.3% were knowledgeable on VCT, 73.3% had positive attitude towards VCT for HIV and 61.8% had had VCT for HIV in the past. Previous residence before joining the university, level of education, sex and religion were among the socio-demographic variables that showed statistically significant association with the one or more of the outcome variables. Fear of positive results, stigma and discrimination following the positive results were reported as main barriers for VCT uptake (16).

3. Significance of the study

This study of knowledge attitude and practice towards VCT among TTC students in Gondar town will help to identify socio-demographic factors related to KAP towards VCT for HIV, provide relevant information for responsible bodies. This study will also provide additional information to the available studies.

4. Objectives

4.1.General Objective

- To assess knowledge attitude and practice towards VCT for HIV Gondar TTC students

4.2.Specific Objectives

1. To determine the level of knowledge of students towards VCT for HIV.
2. To determine the attitude of students towards VCT
3. To determine the practice of students towards VCT.
4. To determine the socio-demographic factors associated with KAP towards VCT for HIV

5. Materials and methods

5.1.Study area

The study was conducted in Gondar TTC, located 739 km away from Addis Ababa, North West Ethiopia. The college is one of the colleges training teachers in the Amhara region. Currently, in the regular program, there are 2231 students enrolled in six departments.

5.2.Study design and period

Across-sectional study was conducted from January to June, 2014.

5.3.Source Population

The source population of the study were all students available during the study period.

5.4.Study population

Students selected using appropriate sampling techniques were the study participants.

5.5.Sample Size and Sampling Technique

The required sample size of the study participants was determined by a single population proportion formula as follows.

$$n = \frac{z^2 p(1-p)}{w^2}$$

where;

n= the desired sample size required; z=the standard normal deviation (1.96); w= the margin of error (0.05); p =the proportion of the target population estimated to have particular characteristics (50%)

Accordingly the sample size calculated was 328, but adjustment was made since the total population was less than 10,000, i.e. 2231, according to the following formula.

$Nf = \frac{n}{1+n/N}$; where Nf= adjusted sample size; n= initial sample size and N= total population

Accordingly the adjusted sample size was 328. By adding 10% for the compensation of non-respondents the final sample size is 364.

Study participants were selected based on multistage sampling technique. Students were stratified based on their year of study as 1st year, 2nd year and 3rd year students. The number of students from each batch were proportionally allocated and departments from each batch were

randomly selected. From each department students were randomly selected using the roaster list as a sampling frame.

5.6.Variables of the study

5.6.1. Independent variables

- Socio-demographic characteristics
- Age
- Sex
- Residence
- Year of study
- Religion
- Ethnicity
- Marital status

5.6.2. Dependent variables

- Knowledge
- Attitude
- Practice

5.6.3Data collection

Data was collected using self-administered structured questionnaire, prepared for the purpose of this research, containing five parts. The first part was contain questions on socio-demographic characteristics, the second part was concerned on the general knowledge of students on HIV/AIDS. The third ,the fourth and fifth parts was focus on questions related to knowledge, attitude and practice of VCT for HIV, respectively. The questionnaire was prepared in English and translated to Amharic. To check for its consistency it was back translated to English. The questionnaire were pre-tested in about 5% of the sample size at University of Gondar, medical laboratory students.

5.7.Data Analysis and Interpretation

Data was entered and analyzed using SPSS version 16. Results were summarized in frequencies and percentages and presented in tables and graphs. Association between dependent and independent variables were assessed using chi-square test. In all cases a P-value less than 0.05 was considered as statistically significant.

5.8.Result Dissemination

The result of the study submitted to the school of biomedical and laboratory science.

5.9.Ethical Consideration

Ethical clearance was obtained from the ethical review committee of the school of biomedical and laboratory sciences. Permission to conduct the study was obtained from the college administration. The purpose of the study was explained for the study participants and data was collected after obtaining informed consent from each participant. All information was be kept confidential and data was collected anonymously.

results

Socio-demographic characteristics of the respondents

A total of 364 Subjects were planed and the studied giving a response rate of100%. As shown in table 1, 188(51.6%) respondents were males and 176(48.4%) were females. The mean (±SD) age of the study participants was 20.5 (±1.5) years. The majority 359 (98.6%), 307(84.3%), 216(59.3%) were orthodox Christian in religion, not married and come from rural areas respectively (table 1).

Table 1: Socio-demographic characteristics of the study participants

Characteristics	Frequency (%)
Sex	
Male	188(51.6)
Female	176(48.4)
Age	
17-20	215(59.1)
21-25	149(40.9)
Year of study	364
1st year	79(21.7)
2nd year	138(37.9)
3rd year	147(40.4)
Religion	
Orthodox	359(98.6)

Muslim	5(1.4)
Residence	
Urban	148(40.7)
Rural	216(59.3)
Marital status	
Single	307(84.3)
Married	53(14.6)
Divorced	4(1.1)

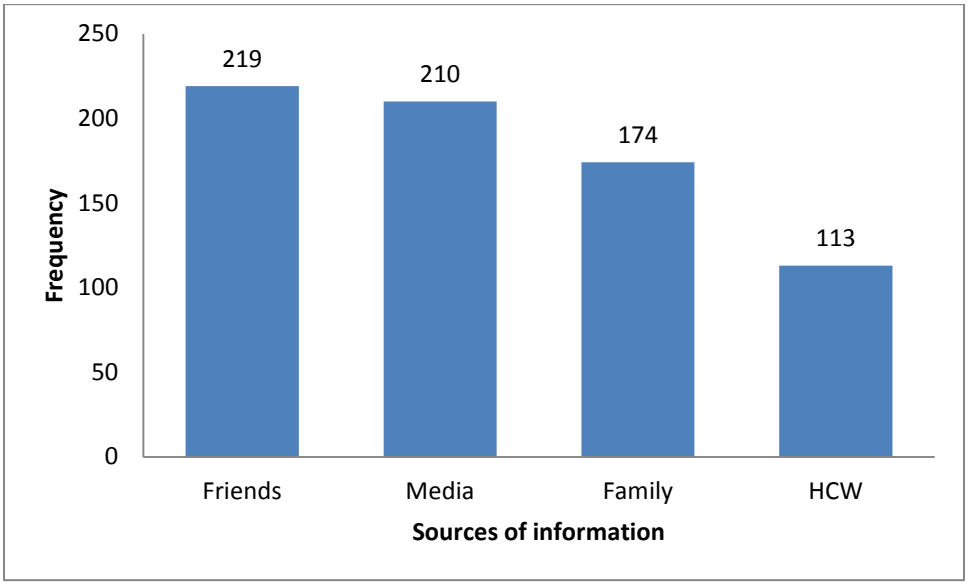
Knowledge about HIV/AIDS

A total of 6 questions, with "Yes" and "No" response, were included in the questionnaire regarding the knowledge of the study subjects about HIV/AIDS. Those who answered greater than or equal to the 70% of the questions correctly were considered as knowledgeable and less than 70% were considered as not knowledgeable. The result indicates that 355 (98.3%) of the students are knowledgeable about HIV/ADIS. All the study participants responded that HIV can be transmitted by unsafe sex, HIV is transmissible, HIV is preventable and HIV cannot cured (Table 2). Friends, media, family and health care workers were the sources of information about HIV/AIDS for the 60.2%, 57.7% , 47.8% and 31% of the study participants (Figure 1).

Table 2: Responses given by study participants for questions related to knowledge about HIV/AIDS

Questions	Responses	Frequency (%)
Is HIV transmitted by unsafe sex?	Yes	364(100)
	No	
Have you heard about HIV?	yes	364(100)
	no	
Healthy looking person can have HIV?	yes	337(92.6)
	No	27(7.4)
HIV is preventable?	yes	364(100)

	No	
HIV is transmittable?	yes	364(100)
	No	
HIV/AIDS infected person can be cured	yes	
	no	364(100)



Attitude towards VCT for HIV

A total of eleven (11)-item attitude indicator responded as either "Yes" or" No", towards VCT for HIV test was used to assess the student's level of attitude towards VCT. A score serving as a proxy variable was calculated by adding each of the attitudinal scores after giving a value of 1 and 0 for positive and negative responses respectively. Accordingly 124 (34.064%) of the respondents had positive attitude towards VCT for HIV. Majority, 213(58.5%) 297(81.39%) of the respondents would recommend VCT to their partners and interested to get VCT service for themselves respectively (Table 3). Majority (63.7%) of the study participants responded that they can take VCT for HIV by any trained personnel (Fig. 2).

Table 3: Responses given to Questions on attitude towards VCT for HIV

question	Responses	Frequency (%)
Who should be tested for HIV?	All people	115(31.6)
	Sex workers	262(72)
	Only adults	263(72.3)
When does HIV tested?	At any time	276(75.8)
	During marriage	210(57.7)
	During sick	210(57.7)
	Aboard traveling	224(61.5)
Do you want to undergo VCT?	yes	297(81.59)
	no	
Do you recommend VCT for others?	yes	213(58.5)
	no	151(41.5)

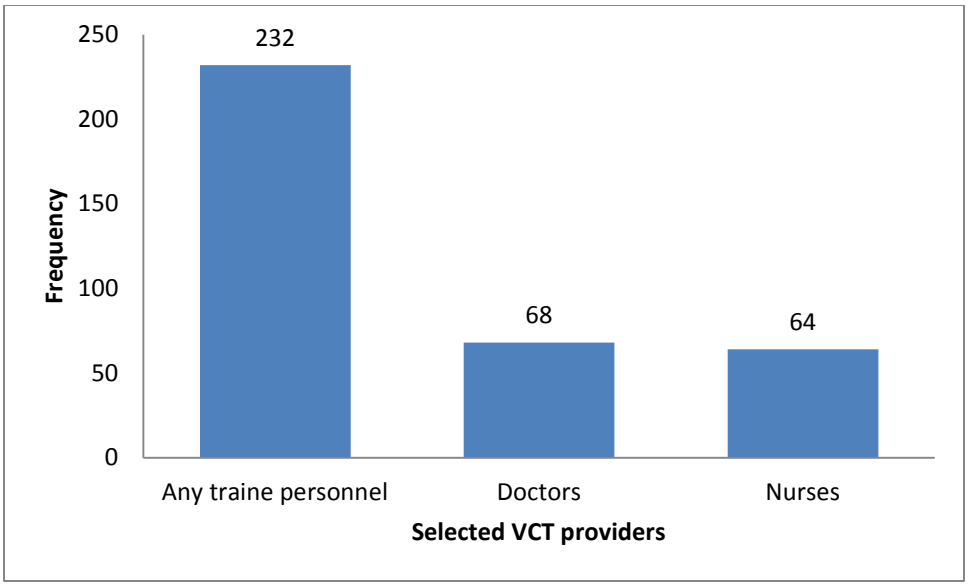


Figure 2: Study participants' preference of VCT provider

Practice of VCT for HIV

From the study participants only 28.6% had had VCT for HIV in the past and all have received their results.

Table 4: Responses given to Questions on practice towards VCT for HIV

questions	Response	Frequency (%)
Have you taken VCT before?	yes	104(28.6)
	no	260(71.4)
Did you receive the result?	yes	104(28.6)
	no	0

Factors associated with KAP towards VCT for HIV

Among the socio-demographic factor tested for significant association year of study showed statistically significant ($\chi 2$ =; 7.596 p –value<0.022) association with the knowledge of participants about HIV/AIDS (Table 5).

Table 5: Association between socio-demographic variables with the knowledge of respondents about HIV/AIDS

Socio-demographic factors	Knowledge		$\chi 2$ (P-value)
	Knowledgeable N (%)	Not knowledgeable N (%)	
Sex			
Male	184(50.549)	4(1.098)	0.192 (0.661)
Female	171(47.8)	5(1.373)	
Age			
17-20	210(57.69)	5(1.373)	0.047(0.828)
21-25	145(39.835)	4(1.098)	
Marital status			
Married	52(14.285)	2(0.549)	0.521(0.771)
Single	300(82.41)	7(1.923)	
divorced	4(1.098)	0(0)	
residence			
Urban	144(39.56)	4(1.098)	0.055(0.815)
rural	211(57.697)	5(1.373)	
Year of study			
First year	77(21.15)	2(0.549)	7.596(0.022)
Second year	131(35.9)	7(1.923)	
Third year	147(40.38)	0(0)	

Year of study ($\chi 2$=48; P<0.0), previous residence area before joining the college ($\chi 2$= 6.8; P<0.009) and sex ($\chi 2$ =,5. 879 p<0.015) were the socio-demographic variables that showed statistically significant association with the attitude of respondents towards VCT for HIV. Similarly knowledge of respondents about HIV/AIDS showed a significant association with attitude towards VCT for HIV (($\chi 2$ =7.85, P-value < 0.005) (Table 6).

Table 6: Association between socio-demographic variables and knowledge about HIV/AIDS with the attitude of respondents towards VCT for HIV/AIDS

Attitude questions	Categorized attitude		$\chi 2$ (P-value)
	Positive attitude(%)	Negative attitude(%)	
Categorized knowledge			
Knowledgeable	117(32.142)	238(65.384)	7.85(0.005)
Not knowledgeable	7(1.923)	2(0.549)	
Categorize age			
17-20	72(19.78)	143(39.28)	0.078(0.78)
21-25	52(14.285)	9726.648)	
Marital status			
Married	20(5.494)	33(9.065)	0.50(0.779}
Single	103(28.296)	204(56.04)	
divorced	1(0.274)	3(0.824)	
residence			
urban	62(13.033)	86(23.626)	6.801(0.009)
rural	62(13.0.33)	154(42.3)	
Year of study			
First year	33(9.065)	46(12.637)	48(0.0)
Second year	71(19.505)	67(18.406)	
Third year	20(5.494)	127(34.89)	
sex			
Male	75(20.604)	113(31.04)	5.879(0.015)

female	49(13.46)	127(34.89)	

None of the variables showed statistically significant association with practice of VCT for HIV.

Table 7:Association for practice with socio-demographic variables ,attitude and knowledge about VCT for HIV/AIDS

Practice question	Have you taken VCT		
Categorized attitude	Yes(%)	No(%)	
Positive attitude	39(10.71)	175(48.0769)	0.764(0.382)
Negative attitude	65(17.85)	85(23.35)	
Categorized knowledge on HIV			
Knowledgeable	103(28.296)	252(69.23)	1.379(0.24)
Not knowledgeable	1(0.2747)	8(2.19)	
Categorized age			
17-20	69(18.95)	146(40.1)	3.192(0.074)
21-25	35(9.61)	114(31.31)	
Marital status			
Married	15(4.12)	38(10.43)	0.91(0.634)
Single	87(23.901)	220(60.43)	
divorced	2(0.495)	2(0.495)	
residence			
Urban	63(17.307)	105(28.846)	0.028(0.866)
rural	61(16.75)	155(42.58)	
Year of study			
First year	26(7.142)	53(14.56)	0.972(0.615)
Second year	37(10.16)	101(27.74)	
Third year	41(11.26)	106(29.12)	

sex			
Male	55(15.1098)	133(36.538)	0.089(0.765
female	49(13.46)	127(34.89)	

Scoring

For knowledge about VCT, each question had a response of “Yes” for correct answers or “No” for wrong answers who scored greater than or equal 70% were considered as knowledgeable and less than 70% were considered as not knowledgeable. A five-item attitude indicator, responded as either “Yes” or “No”, towards VCT test was used to assess the student’s level of attitude towards VCT. A score serving as a proxy variable was calculated by adding each of the attitudinal scores after giving a value of “1” and “0” for positive and negative responses respectively. Respondents who scored greater than or equal the proxy variable were considered as having positive attitude and those scored less than the proxy variable were considered as having negative attitude . Practice was assessed

using one question having “Yes” or “No” response. Those who responded “Yes” were considered as they had had VCT service in the past.

Discussion

young peoples are the center of HIV/ AIDS epidemics yet, they are the greater hope to change the course of the epidemics .voluntary counseling and HIV testing is an important component of HIV/AIDS prevention and control intervention(6).effective prevention of HIV/AIDS epidemics depends to the VCT practice and on the collection of reliable data. There for taking this in to account this stuffy attempted. To generate information on knowledge attitude and practice towards VCT among TTC students in Gondar town 2014 **.**

From the finding of this study the overall knowledge of respondents about VCT for HIV was high (98.35%). This is in line with the study done in Kilimanjaro region, Tanzania and Tiko Cameroon which is all respondents are knowledgeable of VCT for HIV. also in this study the overall respondents were heard about HIV/AIDS (100%) a comparable report was found in tiko Cameroon school students(100%) [5,13].

In this finding males are little bit more knowledgeable than female this indicates that the participation of both sex on VCT is in a good manner but research done in Mekelle, Tigray, university students(14). Which is females have higher knowledge than male this might be due to the difference in the socio-demographic characteristics, especially sex and age .

This students have favorable knowledge 98.43% perceive as VCT is the most important for the prevention and control of HIV/AIDS. And majority believed that VCT is necessary for different reasons including knowing self status and caring for the future, to prevent HIV/AIDS and to choose partners for the future.

However, the current study is high when compared to study conducted in different areas, Nigeria polytechnic 63.2%, Debre Markos 81%, Gondar 86.2% (6,15,16) .this might be year of study ,age and time of the research conducted cause for the variation of the awareness on the study participants. 219(60.2%) 210(57.7%) of respondents list their source of information ,friends media are the main source of information respectively and the last less respondents were health care workers even if the degree varies reports from Nigeria polytechnic, tiko cameroon debre markos university were similarly(6,13,15). I have believed this result is due to the communication between friends, about HIV/AIDS epidemics with their friends and current access of media coverage for all.

From the finding of this study the overall attitude(34.064%) of respondents about VCT for HIV was lower than the study conducted in university students in North West Ethiopia, Gondar(73.3%),(16). This might be due to the difference in the socio-demographic characteristics, especially the educational level, and residence of the study participants. Hence, working on the attitude change will facilitate the uptake of VCT service

The result of this study identified that 28% of the study subjects were receive the result of the test and 260(71%) were not receive the result due to lack of awareness transparency and fear of stigma and isolation from community . from this study over all VCT practice was 42.3% and relatively Students who comes from rural have similar practiced on VCT with urban 16.75% and 17.307% respectively and both sex have similar percentage of practice(13.46% female,15.102%male this shows the current education given by anti HIV/AIDS clubs and governmental police on HIV/AIDS and VCT is significantly addressed equally on both sex , urban and rural students. The results from this study also indicated a Lower VCT practice than study conducted in university students north west Ethiopia Gondar(**68.1%)** , deber markos university students (58.5%) ,and Nigeria polytechnic in south in east(74.2%) , where majority of the adults were would recommend VCT to their friends (16,15,6). but greater than study conducted in Kilimanjaro region, Tanzania(34.6%) (5) These all difference may be attributable to one's educational level, health beliefs and health seeking behavior, cultural, beliefs, social networks, income, perceived health status and the police. According to this study the main reason for those who had never had VCT in the past was fear of positive result and stigma and discrimination following the result from their friends and from the community.

Previous residence before joining the college, year of study, sex among the socio-demographic variables and knowledge with attitude that showed statistically significant association with the one or more of the outcome variables. Fear of positive results, stigma and discrimination following the positive results were reported as main obstacles for VCT uptake by the college students.

CONCLUSION AND RECOMMENDATION

Most of the students has good knowledge towards VCT for prevention of HIV/AIDS and counseled by professional health workers .

A significant proportion of the students have good attitude but most of them have not enough attitude and source of information. This implies that the messages which is being given about VCT by different source is still not deep enough for understanding VCT and HIV/AIDS.

Generally 98.349% of study subjects have good knowledge towards VCT and 33.65% have also good attitude.

Recommendation

Based on the study finding the following recommendation are given.

Strong health education using different teaching aids concerning HIV/AIDS should be given starting from primary and high school and particular for rural primary and high school students. Because they have less source of information and access.

There is still misunderstanding about VCT, so VCT should be given by special trend person and VCT center should be increase their branch to rural area.

Youth and anti HIV/AIDS clubs should strength their work on VCT and regular evaluation of VCT program.

Protecting young people and society as a whole from HIV/AIDS is a big job for any sector, so health workers ,mass medias , school teachers families, NGOS and resource mobilized to reach all youth and society.

To stop the spread of HIV/AIDS, VCT is the main method, so further study on factors that decrease knowledge attitude ,and practice towards VCT is recommended.

Limitation of the study

The finding of this study must be interpreted in the context of the limitations encountered. This was a questionnaire-based cross-sectional study which was completely based on information provided by the respondents, which may lead to bias and misunderstanding of questions. the study was done during the final examination test so this made less attention for the question due to time and tension by the students. The use of mean to classify have good attitude and negative attitude may contribute to the bias in this study. Other ways, it provides useful information for further study.

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QUESTIONAR

Part I: Questions on socio-demographical characteristics of the students.

No.	Questions	Responses
001	Age	
002	Sex	A. Male B. Female
003	Year of study	A. 1st year B. 2nd Year C. 3rd year
004	Religion	A. Orthodox B. Muslim C. Protestant D. Catholic

		E. Others
004	Residence	A. Urban B. Rural
005	Ethnicity	A. Amhara B. Oromo C. Tigrie D. Others
006	Marital Status	A. Single B. Married C. Widowed/divorced

Part II: Questions to assess knowledge of study participants about HIV/AIDS

No.	Questions	Responses
001	Have you heard about HIV/AIDS	A. Yes B. No
002	In what way you get information?	A. Family B. Friends C. mass media D. Health worker E. Others
003	Do you think that a healthy looking person can be infected with HIV?	A. Yes B. No
004	Is HIV transmittable disease?	A. Yes B. No
004	Can HIV be preventable?	A. Yes B. No
005	Does HIV/ADIS have a cure?	A. Yes B. No
006	Do you know that there is treatment for HIV/ADIS?	A. Yes B. No
007	in what ways HIV is transmitted?	A. Un-safe sex B. mother to child C. blood transfusion D. sharing sharp items E. Mosquito bite. F. Eating with infected person

Part III: Questions to assess Knowledge of students about VCT for HIV

No.	Questions	Responses
001	have you ever heard about VCT	A. Yes

		B. No
002	where did you get this information about VCT	A. Family B. Friends C. mass media D. Health worker E. Others
003	Do you know HIV blood test is given with counseling service?	A. Yes B. No
004	Do you know that HIV test is conducted voluntary?	A. Yes B. No
004	Do you know the place or the organization where VCT service has been provided?	A. Yes B. No
005	Is VCT important for prevention and control of HIV/ADIS	A. Yes B. No

Part IV:Questions used to Assess Attitude of students towards VCT for HIV

No.	Questions	Responses
001	Who should, do you think, test for HIV?	A. Everybody B. Those who are sick C. only sexually active D. those with multiple sexual partners
002	When does a person Should be tested?	A. Any time B. During illness C. Before marriage D. During travel aboard.
003	By whom do you prefer VCT?	A. Physician B. Nurse C. Trained counselor D. Religious leaders
004	Do you feel that VCT is necessary?	A. Yes B. No
004	do you recommend HIV test to your peer ?	A. Yes B. No
005	Are you interested to take VCT whether you have it before or not?	A. Yes B. No
006	If yes, where do you prefer	A. Governmental institution B. NGO C. Private institution

Part IV: Questions used to assess practice of students of VCT for HIV

No.	Questions	Responses
001	Have you ever had VCT in the past?	A. Yes

		B. No
002	If yes, when was it?	A. A year ago B. Two year ago C. Three year ago D. Before four year. E. This year
003	Where did you get testsed	A. Hospital B. Health center C. NGO clinic D. Private clinic
004	Did you receive the results	A. Yes B. No
	Which part of the counseling did you get	A. Pre test counseling B. Post test counseling C. Both
005	If no, what is your reason?	A. Fear of stigma and discrimination B. Fear of positive result C. Partner and self trust D. Partner refusal.
004	Have you been satisfied with the counseling?	A. Yes B. No
005	If yes, what was the reason?	A. Quick service B. Confidentiality C. Free service D. Others
005	If no, what was your reason?	A. Long waiting time B. Lack of confidentiality C. Lack of privacy D. Unclear counseling E. Others